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SEQ ID NO: 1 Complete cDNA sequence of DB46

G A A A C T G A A A C G A G T A C T C T T T C A G T G G T G A G G T T 35
 C T G A G A G A T T C A G A A A T G A A T T G G G T G T G G C C A A A 70
 G A C A A A G A G C A T G A G C T T C C T A C T C C T C A T C A C T T 105
 T T C T A C T C T T C T C A T T G C C A A A A C T T T C T T C T T C G 140
 C A A T A T G T T G G G A A C A G T A T C T T A C T A A A T C A T C G 175
 T A A G A T A C T T T C C C A A C C A G G A A C T C C T T A C C T C T T 210
 A C G C T G T C A T C T T T G A T G C T G G T A G C T C T G G G A G T 245
 C G T G T C C A T G T C T T T C A A T T T T G A C C A G A A C T T A G A 280
 T C T C C T G C A C A T T G G C A A T G A C C T C G A G T T T A C A A 315
 A A A A G A T C A A A C C C G G T T T G A G C T C A T A C G C T G A T 350
 A A G C C T G A A A A A G C T G C A G A A T C T C T C A T T C C A C T 385
 T T T G G A G G A A G C T G A A G A T G T T G T C C C T G A G G A A C 420
 T G C A C C C C A A G A C A C C C C T T A A G C T T G G G G C A A C A 455
 G C A G G T T T G A G G C T C T T G G A T G G G A T G C T G C T G A 490
 A A A G A T A T T T G C A A G C G G T T A G G G A A A T G T T C A G G A 525
 A C A G A A G T T C C C T G A G C G T T C A A C C T G A T G C A G T A 560
 T C T G T T A T T G A T G G A A C C C A A G A A G G T T C T T A C T T 595
 A T G G G T T A C A G T T A A C T A T C T G T T A G G A A A G T T G G 630
 G A A A G A A G T T T A C A A A A A C T G T G G G A G T G A T A G A T 665
 C T T G G A G G T G C T T C A G T T C A A A T G G C T T A T G C T G T 700
 C T C A A G A A A T A C A G C T A A A A A T G C C C C A A A A C C A C 735
 C A C A A G G A G A G G A T C C A T A C A T G A A G A A G C T T G T A 770
 C T C A A G G G A A A G A A A T A T G A C C C T T A T G T T C A C A G 805
 T T A C T T G C G T T A T G G T A A C G A C G C A G C A C G T G T T A 840
 A G A T T T T T A A G A C C A C T G A T G G T G C T G C T A G T C C T 875
 T G T C T A T T T G G C A G G C T A T G A A G A T A T A T A C A G A T A 910
 T T C C G G A G A A T C G T A C A A T A T C T A T G G T C C C A C T T 945
 C T G G T G C C A A C T T T A A T G A A T G C C G T G A C C T A G C T 980
 C T T C A G A T T C T C A G A T T G A A T G A A T G A G C C A T G T T C C C A 1015
 T G A A A A C T G C A C C C T T T G G T G G G A T A T G G G A T G G T G 1050
 G A A A A G G A A G T G G A C A G A A A A A C C T T G T T G T T A C T 1085
 T C A G C T T T C T A C T A T A G G T C T T C T G A G G T T G G T T T 1120
 T G T C A C T C C T C C C A A T T C C A A A A A T C G C C C T C T G G 1155
 A T T T T G A A A C T G C A G C T A A A C A A G C T T G T A G T T T A 1190
 A C A T T C G A G G A A G C G A A A T C C A C T T T T C C A A A T G T 1225
 T G A G A A A G A T A A A C T T C C A T T T G T A T G C G T G G A T T 1260
 T C A C A T A C C A G T A T A C A T T G C T T G T T G A T G G A T T T 1295
 G G C C T A G A T C C A G A G C A A G A G A T T A C A G T G G C A G A 1330
 A G G A A T T G A A T A T C A A G A T G C C A T T G T G G A A A C A G 1365
 C A T G G C C T C T A G G A A C T G C C A T A G A A G C C A T A T C A 1400
 T C T T T G C C T A A A T T T A A T C G T C T A A T G T A T T T T A T 1435
 C T A A G C C A T G T C C T C C A C T T A T G A C C A C T T T A A A T 1470
 A A A A T A A A A C T C A C C C T T T T C A C T A A A A A A A A A A 1505
 A A A A A A A A G T C C T T T T T A T T C C A T T G A G T A T C A A 1540
 G T G T A A A T G T T T T T G A C A A A T G G A G G T G T A A A A 1575
 G T G A A A C A A A G T A T G T T T T T G T C A G A T A C G A A T G G 1610
 A A G T A G G G T T A T G A T G A A A A A A A A A A A A A A A A 1643

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M N W V W P K T K S M S F L L L I T F L L F S L P K L S S S Q Y V G N S I L L N -9
H R K I L P N Q E L L L T S Y A V I F D A G S S G S R V H V F N F D Q N L D L L H 32
I G N D L E F T K K I K P G L S S Y A D K P E K A A E S L I P L L E E A E D V V 72
P E E L H P K T P L K L G A T A G L R L L D G D A A E K I L Q A V R E M F R N R 112
S S L S V Q P D A V S V I D G T Q E G S Y L W V T V N Y L L G K L G K K F T K T 152
V G V I D L G G A S V Q M A Y A V S R N T A K N A P K P P Q G E D P Y M K K L V 192
L K G K K Y D L Y V H S Y L R Y G N D A A R V K I F K T T D G A A S P C L L A G 232
Y E D I Y R Y S G E S Y N I Y G P T S G A N F N E C R D L A L Q I L R L N E P C 272
S H E N C T F G G I W D G G K G S G Q K N L V V T S A F Y Y R S S E V G F V T P 312
P N S K N R P L D F E T A A K Q A C S L T F E E A K S T F P N V B K D K L P F V 352
C V D F T Y Q Y T L L V D G F G L D P P E Q E I T V A E G I E Y Q D A I V E T A W 392
P L G T A I E A I S S L P K F N R L M Y F I 414

5' CAA ATT AAG AAC ATG GAG TTC CTA ATT ACA CTC ATT GCC ACT TTT TTA CTC TTG

 Q I K N M E F L I T L I A T F L L L

 TTA ATG CCT GCA ATC ACT TCC TCC CAA TAT TTA GGA AAC AAC CTA CTC ACT AAT

 L M P A I T S S Q Y L G N N L L T N

 CGA AAG ATT TTC CAA AAA CAA GAA ACC TTA ACC TCT TAC GCT GTC ATA TTT GAT

 R K I F Q K Q E T L T S Y A V I F D

 GCT GGT AGC ACT GGT ACT CGT GTC CAT GTT TAC CAT TTT GAT CAG AAC TTA GAT

 A G S T G T R V H V Y H F D Q N L D

 CTA CTT CAC ATT GGC AAT GAT ATT GAG TTT GTT GAC AAG ATC AAA CCA GGT TTG

 L L H I G N D I E F V D K I K P G L

 AGT GCA TAT GGG GAT AAT CCT GAA CAA GCA GCA AAA TCT CTC ATT CCA CTT TTG

 S A Y G D N P E Q A A K S L I P L L

 GAG GAA GCA GAA GAT GTG GTT CCT GAG GAT CTG CAC CCC AAA ACA CCC CTT AGG

 E E A E D V V P E D L H P K T P L R

 CTT GGG GCA ACC GCA GGT TTG AGG CTT TTG AAT GGG GAT GCT GCT GAA AAG ATA

 L G A T A G L R L L N G D A A E K I

 TTG CAA GCG ACA AGG AAT ATG TTC AGC AAC AGA AGT ACC CTC AAC GTT CAA CGT

 L Q A T R N M F S N R S T L N V Q R

 GAT GCA GTT TCT ATT ATT GAT GGA ACC CAA GAA GGT TCT TAT ATG TGG GTG ACA

 D A V S I I D G T Q E G S Y M W V T

 GTT AAC TAT GTA TTG GGG AAT TTG GGA AAA AGC TTC ACA AAA TCA GTG GGA GTA

 V N Y V L G N L G K S F T K S V G V

 ATT GAC CTT GGA GGT GGT TCA GTT CAA ATG ACA TAT GCA GTG TCA AAG AAA ACA

 I D L G G G S V Q M T Y A V S K K T

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659	677	686	695	704
GCA AAA AAT GCT CCT AAA GTT GCT GAT GGA GAG GAT CCA TAT ATT AAG AAG CTT				
A K N A P K V A D G E D P Y I K K L				
713	722	731	740	749
GTG CTC AAG GGA AAG CAA TAT GAT CTC TAT GTT CAT AGT TAC TTG CGT TTT GGC				
V L K G K Q Y D L Y V H S Y L R F G				
767	776	785	794	803
AAA GAA GCA ACT CGA GCA CAG GTT TTG AAT GCA ACT AAT GGA TCT GCT AAC CCT				
K E A T R A Q V L N A T N G S A N P				
821	830	839	848	857
TGC ATT TTA CCT GGA TTT AAT GGG ACC TTT ACA TAT TCA GGA GTG GAG TAT AAG				
C I L P G F N G T F T Y S G V E Y K				
875	884	893	902	911
GCT TTT TCC CCT TCT TCT GGC TCC AAC TTT GAT GAT TGC AAA GAA ATA ATT CTT				
A F S P S S G S N F D D C K E I I L				
929	938	947	956	965
AAG GTT CTT AAA GTA AAT GAT CCA TGT CCC TAT CCG AGT TGC ACT TTT GGT GGA				
K V L K V N D P C P Y P S C T F G G				
983	992	1001	1010	1019
ATA TGG AAT GGT GGA GGA GGG AGT GGA CAA AAA AAA CTT TTT GTT ACT TCA GGT				
I W N G G G G S G Q K K L F V T S A				
1037	1046	1055	1064	1073
TTC GCT TAC CTG GCT GAA GAT GTT GGT ATG GTT GAG CCA AAT AAA CCT AAT TCC				
F A Y L A E D V G M V E P N K P N S				
1091	1100	1109	1118	1127
ATA CTT CAT CCA GTA GAT TTC GAA ATT GAA GCT AAG CGA GCT TGT GCA TTA AAC				
I L H P V D F E I E A K R A C A L N				
1145	1154	1163	1172	1181
TTT GAG GAT GTC AAA TCC ACT TAT CCT CGA CTT ACG GAT GCA AAA CGT CCA TAT				
F E D V K S T Y P R L T D A K R P Y				
1199	1208	1217	1226	1235
GTA TGC ATG GAT CTC TTA TAC CAA CAT GTG TTG CTT GTT CAT GGA TTT GGC TTA				
V C M D L L Y Q H V L L V H G F G L				
1253	1262	1271	1280	1289
GGT CCA CGA AAA GAG ATT ACA GTA GGT GAG GGA ATT CAA TAT CAG AAT TCT GTT				
G P R K E I T V G E G I Q Y Q N S V				
1307	1316	1325	1334	1343
GTG GAA GCT GCA TGG CCT CTA GGT ACT GCC GTG GAA GCC ATA TCA GCG TTA CCT				
V E A A W P L G T A V E A I S A L P				

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	1361		1370		1379		1388		1397		1406						
AAG	TTT	AAG	CGA	TTA	ATG	TAT	TTT	ATT	TAA	GCT	TTT	AGA	GAT	GTC	AAG	ATA	TTT
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
K	F	K	R	L	M	Y	F	I	*	A	F	R	D	V	K	I	F
	1415		1424		1433		1442		1451		1460						
CAG	TAA	CAG	CTA	ACT	TTA	TCA	AAA	ATT	AAA	TAA	AAC	TGG	CGC	ATT	TTG	TCT	TTC
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Q	*	Q	L	T	L	S	K	I	K	*	N	W	R	I	L	S	F

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5'  AAG TGC TCT TCT CTC TGT AGT TAG TTG CAT TGG ACT AAA GCC ATG GAC TTC TTA
    K  C  S  S  L  C  S  *  L  H  W  T  K  A  M  D  F  L

    63      72      81      90      99      108
ATT AGT CTC ATG ACC TTT GTG TTC ATG TTA ATG CCT GCT ATC TCT TCC TCC CAA
I  S  L  M  T  F  V  F  M  L  M  P  A  I  S  S  S  Q

    117      126      135      144      153      162
TAT CTC GGA AAC AAC ATT CTC ATG AAT CGT AAG ATA TTA CTC CCC AAA AAT CAG
Y  L  G  N  N  I  L  M  N  R  K  I  L  L  P  K  N  Q

    171      180      189      198      207      216
GAA CCA GTT ACA TCA TAC GCT GTT ATA TTT GAT GCT GGT AGC ACT GGA AGC AGA
E  P  V  T  S  Y  A  V  I  F  D  A  G  S  T  G  S  R

    225      234      243      252      261      270
GTC CAT GTC TAC AAT TTT GAT CAG AAC TTA GAT CTC CTT CCC GTT GAA AAC GAA
V  H  V  Y  N  F  D  Q  N  L  D  L  L  P  V  E  N  E

    279      288      297      306      315      324
CTT GAG TTT TAT GAT TCG GTT AAA CCC GGT TTG AGT TCA TAC GCT GCT AAT CCT
L  E  F  Y  D  S  V  K  P  G  L  S  S  Y  A  A  N  P

    333      342      351      360      369      378
GAA GAA GCT GCA GAA TCT CTG ATT CCA CTT CTA AAA GAA GCA GAA AAT GTG GTT
E  E  A  A  E  S  L  I  P  L  L  K  E  A  E  N  V  V

    387      396      405      414      423      432
CCT GTG AGC CAG CAA CCC AAC ACA CCC GTT AAG CTT GGG GCA ACT GCA GGT TTA
P  V  S  Q  Q  P  N  T  P  V  K  L  G  A  T  A  G  L

    441      450      459      468      477      486
AGG CTT TTG GAG GGG AAT GCT GCT GAA AAT ATA TTG CAA GCG GTC AGG GAT ATG
R  L  L  E  G  N  A  A  E  N  I  L  Q  A  V  R  D  M

    495      504      513      522      531      540
CTC AGC AAC AGA AGT GCC CTT AAT GTT CAA TCA GAT GCA GTA TCT ATT CTT GAT
L  S  N  R  S  A  L  N  V  Q  S  D  A  V  S  I  L  D

    549      558      567      576      585      594
GGA ACC CAA GAA GGT TCT TAT CTT TGG GTG ACA ATT AAC TAT CTC TTG GGG AAG
G  T  Q  E  G  S  Y  L  W  V  T  I  N  Y  L  L  G  K

    603      612      621      630      639      648
TTG GGA AAA AGA TTT ACA AAG ACA GTG GGA GTA GTT GAT CTA GGA GGT GGG TCA
L  G  K  R  F  T  K  T  V  G  V  V  D  L  G  G  G  S

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657	666	675	684	693	702
GTG CAA ATG ACA TAT	GCA GTC TCA AGG	AAC ACA GCT AAA AAT	GCT CCA AAA GTA		
V Q M T Y	A V S R N T A	K N A P K	V		
711	720	729	738	747	756
CCT GAA GGA GAG GAT	CCA TAC ATA AAG	AAG CTT GTA CTC	CAG GGA AAG AAA TAT		
P E G E D	P Y I K K L V	L Q G K K	Y		
765	774	783	792	801	810
GAC CTT TAT GTT CAC	AGT TAC TTG CGC	TAT GGA AGA GAA GCA	TTT CGT GCA GAG		
D L Y V H	S Y L R Y G R	E A F R A	E		
819	828	837	846	855	864
ATT TTC AAG GTC GCT	GGT GGT TCT GCT	AAT CCT TGC ATT	TTA GCT GGC TTT	GAT	
I F K V A	G G S A N P C	I L A G F	D		
873	882	891	900	909	918
GGG GCA TAT ACA TAT	TCC GGA GCA GAG	TAT AAG GTC TCG	GCC CCA GCT TCA	GGA	
G A Y T Y	S G A E Y K V	S A P A S	G		
927	936	945	954	963	972
TCT AAC TTG AAT CAA	TGC AGA AAG ATA	GCT CTT AAG GCT	CTT AAA GTG AAT	GCA	
S N L N Q	C R K I A L K	A L K V N	A		
981	990	999	1008	1017	1026
CCT TGT CCC TAT CAG	AAT TGC ACT TTT	GGT GGG ATA TGG	AAT GGT GGA GGT	GGA	
P C P Y Q	N C T F G G I	W N G G G			
1035	1044	1053	1062	1071	1080
AGT GGT CAA AAA AAT	CTT TTC CTT ACT	TCA TCT TTC TAT	TAC CTC TCT GAA	GAT	
S G Q K N	L F L T S S F	Y Y L S E	D		
1089	1098	1107	1116	1125	1134
GTT GGG ATC TTT GTG	AAT AAA CCC AAT	GCC AAA ATT CGT	CCA GTT GAT TTG	AAG	
V G I F V	N K P N A K I	R P V D L	K		
1143	1152	1161	1170	1179	1188
ACT GCA GCT AAA CTA	GCT TGT AAA ACA	AAT CTT GAG GAT	GCA AAA TCC AAA	TAC	
T A A K L	A C K T N L E	D A K S K	Y		
1197	1206	1215	1224	1233	1242
CCA GAT CTT TAT GAG	AAA GAC AGT GTT	GAA TAT GTG TGC	TTG GAT CTT GTC	TAC	
P D L Y E	K D S V E Y V	C L D L V	Y		
1251	1260	1269	1278	1287	1296
GTG TAC ACA TTG CTT	GTT GAT GGA TTT	GGT CTT GAT CCA	TTT CAA GAG GTT	ACA	
V Y T L L	V D G F G L D	P F Q E V	T		
1305	1314	1323	1332	1341	1350
GTG GCG AAT GAA ATT	GAA TAT CAG GAT	GCT CTT GTG GAA	GCC GCA TGG CCT	CTA	
V A N E I	E Y Q D A L V	E A A W P	L		

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1359	1368	1377	1386	1395	1404
GGC ACT GCC ATA GAA GCA ATA TCA TCA TTG CCT AAA TTT GAG AGA TTA ATG TAT					
---	---	---	---	---	---
G T A I E A I S S L P K F E R L M Y					
1413	1422	1431	1440	1449	1458
TTT ATT TAA ACT ACT AGT ACC TGC TTA AGC CTG GAT TAC CTG AAG AAA TAA AAT					
---	---	---	---	---	---
F I * T T S T C L S L D Y L K K * N					
1467	1476	1485			
GAA ATA AAA GCC GCA TCT TTC TTC CTT GCT T 3'					
---	---	---	---	---	---
E I K A A S F F L A					